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**ABSTRACT**

This invention concerns coatings having high surface area materials and at least one metal ion adsorbed onto the high surface area material as well as substrates having the coating and methods of applying the coating. The substrates may be films, woven fabrics or may be nonwoven fabrics. The coatings have good odor and/or gas absorbing capabilities. Nonwoven fabrics include tissues, towels, coform materials, bonded carded webs, spunbond fabrics and so forth. The substrates may be made into storage and packaging material to reduce odor and retard the ripening of fruit. The substrates may be used in personal care products, to produce clothing for military and civilian applications and many other applications.

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